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EXAMINER	
HOSSAIN, TANIM M	
ART UNIT	**PAPER NUMBER**
2145	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/778,223	BROWN ET AL.	
	Examiner	Art Unit	
	Tanim Hossain	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 February 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-8, 10, 11, 14-21, 22-27, 29, 30, 33, 34, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by O'Neil.

As per claim 1, O'Neil (U.S. 6,128,279) teaches a method of distributing a processing load in a cluster having a plurality of resources, comprising the steps of designating a first resource as an intake for a first session (Abstract; where the determination of whether to process the request in the first network server, and the processing of the request constitute the designation; column 3, lines 58-60); directing a plurality of new client requests for service by the cluster to the intake to form a first group of clients, wherein each client in the first group continues to receive services only from the first resource for as long as those services are provided (Abstract; column 4, lines 1-6; where content based routing implies the direction of client requests); determining that a second resource be designated as a new intake, to balance the processing load among the plurality of resources (Abstract; where the request is routed to another network server; column 3, lines 60-63); designating the second resource as the new intake (column 3, lines 62-63); directing successive new client requests for services by the cluster to the

new intake to form a second group of clients, wherein each client in the second group continues to receive services only from the second resource for as long as those services are provided (column 2, lines 57-60; in conjunction with column 4, lines 1-6; column 3, lines 3-4; and column 4, lines 10-13; where the routing takes place only among servers that are online, which constitutes the use of a sole second resource).

As per claim 2, O'Neil teaches the method of claim 1, wherein the step of designating a first resource as an intake comprises the steps of assigning a unique identifier to each resource in the cluster (column 5, lines 45-49; where the decision to process requests in the first server, or to route it to another implies the existence of the assignment of an identifier to discern the differences between the servers); and selecting the resource that will be designated as a function of its identifier (column 5, lines 49-51; where the resource selection takes place between the differently identified servers).

As per claim 4, O'Neil teaches the method of claim 1, wherein the step of designating a first resource as an intake comprises the steps of calculating a time-out (column 3, lines 42-48; in conjunction with column 7, lines 4-6; and column 4, lines 10-13; where the communication between servers determine whether a certain server is online. If it is not, it will not be designated as an intake, which implies the use of a time-out); and selecting the resource that will be designated as a function of the time-out (column 3, lines 42-48; column 7, lines 4-6; and column 4, lines 10-13).

As per claim 5, O'Neil teaches the method of claim 1, wherein the step of directing the plurality of new client requests for service to the intake to form the first group of clients comprises the steps of receiving a request for service from a new client, wherein the request is

received by a resource other than the intake (column 8, lines 56-61); and directing the client to the intake (column 8, lines 55-56).

As per claim 6, O'Neil teaches the method of claim 1, wherein the step of directing the plurality of new client requests for service to the intake to form a first group of clients comprises the steps of receiving a request for service from a new client, wherein the request is received by a resource other than the intake (column 8, lines 56-61), and transferring the request for service by the new client to the intake (column 8, lines 64-66).

As per claim 7, O'Neil teaches the method of claim 1, further comprising the steps of detecting a termination in a service being provided to a client by one of the plurality of resources (column 7, lines 10-13); determining that the client is requesting a service from the cluster; and directing the client to a current intake for the service requested by the client (column 4, lines 13-19).

As per claim 8, O'Neil teaches the method of claim 1, wherein the step of determining that the second resource be designated comprises the steps of calculating a load value of the first resource (column 6, lines 21-22); comparing the load value to a threshold value (column 6, lines 22-24); and designating the second resource as the new intake, if the load value exceeds the threshold value (column 6, line 21-22; column 7, lines 20-26).

As per claim 10, O'Neil teaches the method of claim 1, further comprising the step of periodically exchanging status messages between the plurality of resources, wherein the step of determining that the second resource be designated occurs if a status message has not been received from the intake within a predetermined period of time (column 3, lines 41-48; and column 4, lines 10-13);

As per claim 11, O'Neil teaches the method of claim 10, wherein the step of designating the second resource as the new intake comprises the step of the second resource assuming the designation as the new intake after the second resource fails to receive the status message from the first resource within the predetermined period of time, said status message identifying the first resource as the intake (column 3, lines 41-48; column 4, lines 10-13; where the second resource assumes the server duties when it is discovered that the first resource is offline. Identification of the first offline server is implied.).

As per claim 14, O'Neil teaches the method of claim 1, wherein the cluster comprises a plurality of nodes on which the plurality of resources are implemented, and wherein the step of designating the second resource as the new intake comprises the steps of: determining that the second resource and first resource reside on a common node (figure 1; column 5, lines 10-12; where the figure shows multiple servers that are part of a cluster, but not precluded from residing on a common node); updating a list stored on the common node, said list indicating that the second resource is designated as the intake (column 3, lines 42-48; where the list is interpreted as the load information transmitted between the servers in the cluster. Storage of this list on the common node is implied); and providing a message from the second resource designating the second resource as the intake (column 3, lines 42-48).

As per claim 15, O'Neil teaches the method of claim 1, further comprising the step of the first resource providing a data message to the plurality of resources in the cluster, said data message including an identification of the first resource and a load value of the first resource (column 3, lines 45-48).

As per claim 16, O'Neil teaches the method of claim 1, further comprising the following steps that are carried out by a client: storing a network address for one resource in the cluster (column 5, lines 13-17); automatically attempting to connect to said one resource at the network address (column 5, lines 17-19); resolving from the cluster a network address for the intake for a service requested by the client; and automatically attempting to connect to the network address for the intake (column 5, lines 13-19).

Claims 17 and 18 are rejected on the same basis as claims 1 and 16, as they are machine-readable media for implementing claims 1 and 16.

As per claim 19, O'Neil teaches a system for distributing a processing load in a cluster comprising: at least one processor for implementing the cluster, said at least one processor comprising a plurality of resources that provide services to a plurality of clients (column 5, lines 39-42); an interface for coupling said at least one processor to the plurality of clients (column 5, lines 41-42; where the distribution of requests implies the coupling of the processor to the clients); a memory in which a plurality of machine instructions are stored (column 5, lines 27-28, 42-44); said machine instructions, when executed by said at least one processor implementing: a first resource operatively connected to the plurality of clients, said resource being designated as an intake that accepts requests from new clients for a service, and in response thereto, forming a first group of clients that continue to receive services only from the first resource for as long as those services are provided (column 5, lines 45-49); said first resource determining to designate a second resource from among the plurality of resources as a new intake, the second resource being connected in communication with the first resource (column 5, lines 48-51; the communication between the resources is implied); designating the second resource as the new

intake to accept new client requests for service, forming a second group of clients that continue to receive services from the second resource for as long as those services are provided (column 5, lines 48-51).

As per claim 20, O'Neil teaches the system of claim 19, wherein the machine instructions further cause a new client request for service to be directed to a resource currently designated as the intake (column 5, lines 45-46; where it is implied that new client requests will be directed to online servers, i.e. those designated as the intake).

As per claim 21, O'Neil teaches the system of claim 19, wherein the machine instructions are executed in a plurality of processors (column 5, lines 26-28, 40-42; column 10, line 61 – column 11, line 30; where the existence of multiple servers implies the existence of a plurality of processors).

As per claim 22, O'Neil teaches the system of claim 19, wherein a first instance of the machine instructions for load balancing are executed to manage the first resource and a second instance of the machine instructions for load balancing are executed to manage the second resource, said machine instructions causing said first instance to communicate with said second instance, and wherein said first instance of the machine instructions cause the first resource to transfer the intake designation to the second resource (column 5, 45-49; where the existence of code means for the servers to communicate with each other is implied, since this capability exists in O'Neil's invention. In column 3, lines 21-24; the discussion of the requests being transferred implies the transfer of the intake designation. In the event that a server is overloaded, it has the ability to transfer further incoming requests, and in turn, the intake designation.).

As per claim 23, O'Neil teaches the system of claim 19, further comprising a client device having a client processor and a client memory (In column 5, lines 13-19; O'Neil teaches the receiving of requests from a remote location, which includes a client device, such as a computer. In this computer, there inherently exists a processor, and a memory) in which are stored: machine instructions (clients with the capabilities of claim 19 would inherently include machine instructions); a list that includes at least one network address corresponding to at least one resource in the cluster, said machine instructions stored in the client memory causing the client processor to: automatically attempt to connect to said at least one resource using the network address corresponding thereto (column 5, lines 13-19; where the remote location discussed is the client device. For the router to be able to receive a request, the client device would have to be able to locate the corresponding network address to the resource, implying the existence of a list. The existence of machine instructions executing this procedure is inherent); receive from the cluster an intake network address corresponding to a resource designated as the intake for said at least one service (column 5, lines 17-18; where the client inherently receives the network address corresponding to the intake); and automatically attempt to connect to the intake network address (column 5, lines 18-19; where the resolving implies the client's attempt to connect to the intake network address).

As per claim 24, O'Neil teaches a method of distributing a processing load among a cluster of nodes, each node providing at least one of a plurality of different types of services, comprising the steps of designating a first instance of a first type of service on a first node as an intake (figure 4); directing new client requests for said first type of service to the intake to form a first group of clients, wherein each client in the first group continues to receive services only

from the first instance on the first node for as long as those services are provided (figure 4, column 7, lines 57-59; column 8, lines 15-17); determining that a second instance of the first type of service be designated as a new intake for the first type of service (column 8, lines 47-51); designating the second instance as the new intake for the first type of service (column 8, lines 49-50); directing a plurality of new client requests for the first type of service to the new intake to form a second group of clients, wherein each client in the second group continues to receive services only from the second resource as long as those services are provided (column 8, lines 49-50; where it is implied that the second server solely offers services to the second group of clients in the event that the first server is unable to do so).

As per claim 25, O'Neil teaches the method of claim 24, wherein the step of directing new client requests for said first type of service to the intake to form a first group of clients comprises the steps of receiving from a new client a request for said first type of service, wherein the request is received at a node other than the node on which the intake is designated (column 8, lines 56-58; column 9, lines 2-4); and directing the client to the intake (column 8, line 49).

As per claim 26, O'Neil teaches the method of claim 24, wherein the step of directing a plurality of new client requests for service to the intake to form a first group of clients comprises the steps of receiving from a new client a request for said first type of service, wherein the request is received at a node other than the node on which the intake is designated (column 8, lines 56-58; column 9, lines 2-4); and transferring the request for service by the new client to the intake (column 8, line 49).

As per claim 27, O'Neil teaches the method of claim 24, wherein the step of determining to designate a second instance as the new intake comprises the steps of calculating a load value

for the first node, said load value being normalized to enable a uniform comparison to corresponding load values for the other nodes of the cluster (column 6, lines 21-25; where the rest of column 6 discusses the comparison of load values); comparing the load value for the first node with a threshold value (column 6, lines 21-22); designating the second instance as the new intake if the load value exceeds the threshold value (figures 2A, 2B).

As per claim 29, O'Neil teaches the method of claim 24, further comprising the step of periodically exchanging status messages between the plurality of nodes, wherein the step of determining that the second resource be designated occurs if a status message has not been received from the intake within a predetermined period of time (column 3, lines 41-48; and column 4, lines 10-13).

As per claim 30, O'Neil teaches the method of claim 29, wherein the step of designating the second instance as the new intake for the first type of service comprises the steps of a second node assuming authority to designate the second instance as the new intake; and automatically selecting the second instance as the new intake from a plurality of instances of the first type of service on the second node after the second node fails to receive the status message from the first instance within a predetermined period of time, said status message identifying the first service instance as the intake (column 3, lines 41-48; and column 4, lines 10-13; column 7, lines 57-58; where the first and second embodiments can be combined in O'Neil's invention.).

As per claim 33, O'Neil teaches the method of claim 24, wherein the step of designating the second instance as the new intake comprises the steps of: determining that the second instance and first instance reside on a common node (figure 1; column 5, lines 10-12; where the figure shows multiple servers that are part of a cluster or node); updating a list stored on the

common node, said list indicating that the second instance is designated as the new intake (column 3, lines 42-48; where the list is interpreted as the load information transmitted between the servers in the cluster. Storage of this list on the common node is implied); and providing a message from the common node to the nodes in the cluster, said message identifying the second instance as the intake (column 3, lines 42-48).

As per claim 34, O'Neil teaches the method of claim 24, further comprising the step of providing a data message from the first node to the plurality of nodes in the cluster, said data message including an identification of the first instance and a load value of the first node (column 3, lines 45-48).

As per claim 36, O'Neil teaches a system for distributing a processing load in a cluster of resources comprising means for enabling communication between the resources comprising the cluster (figure 1; where communication enablement is implied throughout O'Neil's invention); means for enabling communication between the resources comprising the cluster and a plurality of clients requesting services from said resources (figures 1 and 5; column 5, lines 57-60; where communication enablement between server and client is implied throughout O'Neil's invention); means for designating a first resource as an intake so that the first resource accepts requests from new clients for a service, and in response thereto, forms a first group of clients that continue to receive services only from the first resource for as long as those services are provided (Abstract; column 4, lines 1-6; where content based routing implies the direction of client requests); means for determining to designate a second resource as a new intake (Abstract); and means for designating a second resource as the new intake so that the second resource begins to accept requests from new clients for the service, and in response thereto, forms a second group of

clients that continue to receive services only from the second resource for as long as those services are provided (column 8, lines 9-21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 13, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil.

As per claim 12, O'Neil teaches the method of claim 1, wherein the step of designating the second resource as the new intake comprises the steps of: updating a list at each of the plurality of resources in the cluster, said list indicating that the second resource has been designated as the new intake (column 3, lines 34-48; where the communication between the servers multicasting load information implies the use of a regularly updated list. This communication between servers also discloses this information.). O'Neil also teaches the providing of informational messages (column 3, lines 42-43), and the reception of the messages by all servers (column 3, lines 34-35; where the exchange of information implies reception among the resources). Furthermore, O'Neil also teaches that the resources announce their own intake designations (column 3, lines 45-48). However, O'Neil does not specifically teach the process of having the first resource announce that the second resource has been designated, when that event occurs. The difference between claim 12 and O'Neil's disclosure is the origin of the

messages indicating that the second resource has been designated as the new intake. It would have been obvious to one of ordinary skill in the art to modify O'Neil to include the ability for resources to announce intake designations of other resources, as this ability is a simple convenience and constitutes a design choice rather than a patentable distinction.

As per claim 13, O'Neil teaches the step of providing a message from the second resource to the plurality of resources in the cluster identifying the second resource as the new intake to confirm that the second resource has accepted its designation as the new intake and to ensure that the plurality of resources are aware of the new intake (column 3, lines 34-48; where the exchange of load information implies the existence of messages identifying the second resource as the new resource). However, O'Neil does not specifically teach the method of claim 12, on which claim 13 depends. Since claim 12 is rejected on grounds of obviousness, claim 13 is also rejected for the same reason.

As per claim 31, O'Neil teaches the method of claim 24, wherein the step of designating the second instance as the new intake for the first type of service comprises the steps of: updating a list at the nodes in the cluster, said list indicating that the second instance has been designated as the new intake (column 3, lines 34-48; where the communication between the servers multicasting load information implies the use of a regularly updated list. This communication between servers also discloses this information. Because O'Neil discloses the combination of multiple embodiments, the rejection for claim 12 applies here as well). O'Neil also teaches the providing of informational messages (column 3, lines 42-43), and the reception of the messages by all servers (column 3, lines 34-35; where the exchange of information implies reception among the resources). Furthermore, O'Neil also teaches that the resources announce

their own intake designations (column 3, lines 45-48). However, O'Neil does not specifically teach the process of having the first instance of the first resource announce that the second instance of the first resource has been designated, when that event occurs. The difference between claim 31 and O'Neil's disclosure is the origin of the messages indicating that the second instance has been designated as the new intake. It would have been obvious to one of ordinary skill in the art to modify O'Neil to include the ability for resource instances to announce intake designations of other resource instances, as this ability is a simple convenience and constitutes a design choice rather than a patentable distinction.

As per claim 32, O'Neil teaches the method of providing a message from the second node to the nodes in the cluster, said message identifying the second instance as the new intake to confirm that the second instance has accepted its designation as the new intake and to ensure that the plurality of nodes are aware of the new intake (column 3, lines 34-48; where the exchange of load information implies the existence of messages identifying the second resource as the new resource). However, O'Neil does not specifically teach the method of claim 31, on which claim 32 depends. Since claim 31 is rejected on grounds of obviousness, claim 32 is also rejected for the same reason.

Claims 3, 9, 28, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil in view of Liu (U.S. 5,031,089).

As per claims 3 and 9, O'Neil teaches the method of claim 1, but does not specifically teach the step of designating a first (and a second) resource as an intake comprising the steps of calculating a rating value for each resource in the cluster. Liu teaches this limitation (Abstract; column 7, lines 3-5); and also teaches selecting the resource that will be designated as a function

of the rating value (column 7, lines 29-41). It would have been obvious at the time of the invention to combine the embodiments of O'Neil's and Liu's inventions, as they are from the same field of endeavor, namely load balancing servers. The motivation for doing so is predicated on the fact that Liu's invention, taught in the system of O'Neil, allows intake designations to be distributed based on the abilities of the multiple servers, thus diversifying O'Neil's invention.

As per claim 28, O'Neil teaches the method of claim 24, but does not specifically teach the step of designating the second instance as the new intake for the first type of service comprising the steps of calculating a rating value for each resource in the cluster. Liu teaches this limitation (Abstract; column 7, lines 3-5); and also teaches selecting the resource that will be designated as a function of the rating value (column 7, lines 29-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the embodiments of O'Neil's and Liu's inventions by the same argument regarding claims 3 and 9.

As per claim 35, O'Neil teaches the method of claim 24, but does not specifically teach the method further comprising the step of sending a service message from the first instance to a control process executing on the first node, said service message including a unique identification of the first instance and operational status parameters of the first instance that the control process uses to calculate a rating value for the first instance and a load value for the node that are used to determine a future intake designation. Liu teaches this limitation (column 7, lines 3-5, 25-27, 30-34; where the information exchanged between nodes, and also information regarding the node's own workload values is an instance of a service message including an identification of the first resource and its status parameters, used to calculate a rating values and

load values. Column 7, lines 35-40 discuss the future intake designations based on the rating and load values.) It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Liu's teaching in the system of O'Neil, as they are both from the same field of endeavor, namely the load balancing of resources. The motivation for doing so is predicated on the fact that Liu's invention, taught in the system of O'Neil allows for the use of rating values in combination with load values to govern how certain servers will be handled in the future, thus diversifying O'Neil's invention.

Response to Arguments

Applicant's arguments filed December 3, 2004 have been fully considered but are not persuasive.

Regarding claim 1, applicant argues that "O'Neil does not teach nor suggest that clients in a first group or a second group continue to receive services only from first and second resources, respectively, for as long as those services are provided."

a. O'Neil (U.S. 6,128,729) teaches the server receiving requests, which are either processed by the server itself, or are routed to a peer server to be processed (column 3, lines 18-24). This constitutes the existence of a first and second group, where the receiving server's clients constitute a first group, and a server to which requests are routed constitutes the second group. Services are received from solely these first and second groups respectively when, for example, the first server can no longer process any more requests. Every subsequent request is

routed to the second server (see also column 7, lines 45-47). O'Neil also teaches the routing of requests to online servers only (column 4, lines 10-21). Because requests are routed to online servers only, for each group, the processing takes place at those servers for only as long as those services are provided. In the case that the server goes offline, the services are no longer provided at that server (column 7, lines 4-31).

Applicant argues, "There is still no suggestion or teaching that each client in the first group continues to receive services only from the first resource for as long as those services are provided...there is still no suggestion or teaching in O'Neil that each client in this second group continues to receive services only from the second resource for as long as those services are provided."

a. O'Neil teaches the routing of requests to online servers only (column 4, lines 10-21; column 7, lines 4-31). As a result, in a situation that the first resource goes offline, the services are no longer provided at that server, and are thus routed to another. This constitutes the processing of requests at one server for as long as those services are provided. Similarly, for the second group, the services will only be provided for only as long as the second server is online, constituting receiving services from the second resource for as long as those services are provided.

b. Claim 19 is rejected on the same basis as claim 1.

Regarding claim 24, applicant argues "O'Neil fails to expressly teach or suggest that clients in the group requesting the URI will continue to receive services only from the resource devoted to respond to the request for the URI."

a. O'Neil teaches the routing of requests that have specific URIs to servers devoted to processing those URIs specifically (column 7, line 56 – column 8, line 37). Specifically, column 8, lines 10-15 discuss the limiting of requests of a certain URI to be routed to the server assigned to handle that URI. Therefore the group requesting the URI will continue to receive services only from the resource devoted to respond to the request for the URI. See also column 7, lines 45-47.

Regarding claim 36, applicant argues, "In O'Neil, there is no teaching or suggestion that a first group of clients will continue to receive services only from a first resource for as long as those services are provided."

a. As discussed above, O'Neil teaches that requests are handled only by those servers that are online. In the event that the server goes offline, the services are no longer provided by the first resource, and the requests will then be rerouted to a different server.

Applicant argues "O'Neil expressly lacks any suggestion that a group of clients continues to receive services only from the second resource."

a. As discussed above, O'Neil teaches that requests pertaining to a certain URI will receive services only from that server devoted to handle that URI, thus constituting that a group of clients continues to receive services only from the second resource (column 7, line 56 – column 8, line 37).

Regarding claims 12, 13, 31, and 32, O'Neil suggests that the server's load balancing module may provide an indication that network requests should not be routed to a certain server

(column 7, lines 15-20). This would imply that an indication is provided from one server that instructs network requests to be routed to a different server. The indication is sent globally to the load balancing module, and therefore it is received by all servers. These servers would then obey this indication, which could obviously, to one of ordinary skill in the art at the time of the invention, be presented as a list of servers to which requests should be routed. Further, since all of the servers communicate with each other regarding their status (column 3, lines 42-48), this also suggests that a server can identify itself as the new intake, making the rest of the servers aware of this fact. Therefore, all claimed limitations of claims 12, 13, 31, and 32 are certainly suggested by O'Neil.

Claims 3, 9, 28, and 35 are rejected on the same grounds as discussed above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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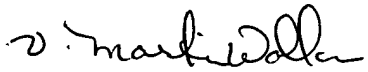
Patent Examiner
Art Unit 2145



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